

A Randomized Controlled Trial of an Orthotic Device for Soldiers with Shin Splints (FY02-2090)

Impact

Unforeseen barriers kept this project from being completed as intended. However, several useful ancillary outcomes resulted from the implementation process.

Description

Overuse injuries are the most common type of injury within the military. Of these injuries, "shin splints" are very prevalent and costly to the Army due to treatment expenses, profile days, and lost duty time. The purpose of this initiative was to evaluate effectiveness of a newly-developed orthotic device. The initial plan was to recruit 40 trainees for the project. Soldiers were assessed at bi-weekly intervals until they were capable of returning to pain-free jogging for at least ½ mile.

Outcomes

It was predicted that this treatment method would result in a 25% decrease in profile days for this condition and a 50% decrease in recurrence rate.

Project barriers

Barriers included poor patient compliance and high drop out rates. Some participants admitted discontinuing use of the device due to discomfort. Other complaints included local skin break-down, induration (hardening of the skin), and/or excessive sweating from the brace. Trainees were also occasionally unable to attend bi-weekly assessment if assigned to morning detail. The increased optempo additionally impacted implementation of this project as planned.

Innovative Features

This initiative examined alternatives to conventional treatments for shin splints in order to decrease pain and return individuals to normal activity more quickly.

Lessons Learned / Recommendations

- It can take longer than anticipated to enroll participants in a new initiative.
- Project barriers are excellent opportunities to discover what *doesn't* work. This information can be just as valuable as knowing what works well.
- Participant feedback is essential in evaluating program outcomes.
- Line partnerships must be established to coordinate detail/training times and program implementation.
- Proposed solutions for decreasing profile days or injury recurrence may not work on the first try. However, the lessons learned can be used to modify the solution in order to find what works.